ATT 2682/4

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In PATENT APPLICATION of:

Confirmation Number: 1383

PADEMARKOLMONEN

Application No.: 09/762,956

Group Art Unit: 2682

Filed: February 15, 2001

Examiner: Yun, Eugene

Title: TRANSMISSION METHOD AND RADIO SYSTEM

REQUEST FOR RECONSIDERATION

Commissioner for Patents P.O. Box 1450? Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated January 25, 2005, Applicants request reconsideration of the patentability of the rejected pending claims 1, 2, 5-13 and 16-23.

The Office Action rejected claims 1, 2, 5-13, and 16-23 under 35 U.S.C. § 103(a) based on U.S. Patent No. 6,347,081 to Bruhn (hereinafter "Bruhn") in view of U.S. Patent Application Publication US 2003/0002446 to Komaili *et al.* (hereinafter "Komaili").

Applicants traverse these rejections because the cited references analyzed, alone or in combination, do not teach or suggest all of the features of the claimed invention.

For example, the cited prior art references, analyzed individually or in combination, fail to disclose, teach or suggest a method comprising "updating, with the received control signals, the operating parameters of the transceiver forming the radio channel to the transceiver in DTX mode, in such a way that when the coding rate of the speech coder increases, the coding rate of the channel coder decreases, and when the coding rate of the speech coder decreases, the coding rate of the channel coder increases," as recited in independent claim 1 and its dependent claims.

The cited prior art also fails to disclose, teach or suggest a transceiver in a radio system comprising "control means which update operating parameters with the received control signals from the transceiver which is connected to the transceiver in DTX mode by means of the radio channel, in such a way that when the coding rate of the speech coder

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increases, the coding rate of the channel coder decreases, and when the coding rate of the speech coder decreases, the coding rate of the channel coder increases," as is recited in independent claims 12 and its dependent claims.

The Office Action recognized that Bruhn does not teach that, when the coding rate of the speech coder increases, the coding rate of the channel coder decreases, and, when the coding rate of the speech coder decreases, the coding rate of the channel coder increases. However, the Office Action looked to Komaili to remedy this deficiency.

Nevertheless, Komaili merely teaches rate adaptation for use in an adaptive multi-rate vocoder. In Komaili, the speech is encoded using a vocoder which samples a voice signal at variable encoding rates (abstract). Komaili's wireless communication system has the ability to increase or decrease the vocoder rate and channel coding in response to the level of interference present in the wireless communication channel, resulting in a communication channel having the best possible speech quality (Page 1, paragraph [0012]). In other words, Komaili describes the processing of speech signals using a vocoder, and does not disclose using DTX techniques.

However, Komaili is silent with respect to the transmission of control signals when there is not a voice signal present in the communication channel. Thus, even if there were proper motivation for combining the cited references, the combination would not further develop DTX techniques implemented by the device, since there is nothing in Komaili about using DTX, or any other transmission of control signals when voice or data signals are not present in the communication channel. Instead, if Bruhn and Komaili were to be combined in the manner suggested by the Office Action, the resulting device would merely constitute an attempt to improve the quality of a voice signal transmitted between SID frames.

Therefore, Komaili fails to cure the admitted deficiency of Bruhn, at least because Komaili is silent with respect to the transmission of control signals when there is not a voice signal present in the communication channel. Accordingly, the combined teachings of Bruhn and Komaili fail to provide the claimed invention including a method comprising updating the received control signals with the operating parameters of the transceiver forming the radio channel to the transceiver in DTX mode so that when the coding rate of the speech coder increases, the coding rate of the channel coder decreases, and when the coding rate of the speech coder decreases, the coding rate of the channel coder increases, as is recited in independent claim 1 and its dependents. Similarly, the combined teachings of Bruhn and Komaili fail to provide a teaching of a transceiver in a radio system comprising control

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means that update operating parameters with the received control signals from the transceiver which is connected to the transceiver in DTX mode by means of the radio channel, in such a way that when the coding rate of the speech coder increases, the coding rate of the channel coder decreases, and when the coding rate of the speech coder decreases, the coding rate of the channel coder increases, as is recited in independent claims 12 and its dependent claims. Accordingly, all of claims 1, 2, 5-13 and 16-23 are patentable.

All objections have been addressed. If anything further is necessary to place the application in condition for allowance, Applicants request that the Examiner contact Applicants' undersigned representative at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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